

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Cancelled)
2. (Currently amended) The process of Claim + 8 where in the Separation Step pressure exceeds 55 psia.
3. (Currently amended) The process of Claim + 8 where in the Separation Step pressure exceeds 130 psia.
4. (Currently amended) The process of Claim + 8 where, after conducting the Separation Step but before introducing Stream B to the intake of the first stage compressor, Stream B is treated by passing it to a condenser, cooling it to a temperature that allows the acid gases to pass the condenser but is sufficiently low to remove one or more other condensable gas from Stream B.
5. (Currently amended) The process of Claim + 8 where at least one acid gas-absorbing chemical Agent in the treatment Fluid is an alkanolamine, comprising from 2 to 6 carbon atoms.
6. (Currently amended) The process of Claim + 8 where at least one acid gas-absorbing chemical Agent is selected from the group consisting of ethanolamine; diethanolamine; diisopropanolamine; triethanolamine; N-methyldiethanolamine; piperazine; N-methylpiperazine; N-hydroxyethylpiperazine; 2-(2-aminoethoxy)ethanol; 2-(2-tert.-butylaminoethoxy)ethanol; and 2-amino-2-methyl-1-propanol
7. (Previously presented) The process of Claim 5 where, included in the treatment Fluid, is at least one co-solvent for acid gases selected from the group of:
 - a) methanol; and
 - b) C₁-C₃ alkyl mono- and di- ethers of ethylene, diethylene, triethylene, tetraethylene, pentaethylene, hexaethylene, heptaethylene, octaethylene, nonaethylene, and undecaethylene glycol; and
 - c) propylene carbonate; 1,3-dimethyl-3,4,5,6-tetrahydro-2(1H)-pyrimidinone; sulfolane; 1-methyl-2-pyrrolidinone; morpholine; N-formylmorpholine; and N-acetylmorpholine.

8. (Previously presented) A regeneration Process for an aqueous, acid gas-rich absorption Fluid comprising at least one nitrogen-based chemical absorbing Agent for an acid gas, which absorption Fluid contains a chemically absorbed acid gas comprising a) hydrogen sulfide, b) carbon dioxide or c) both of said gases, said Process comprising 1) stripping acid gas from the acid gas-rich absorption Fluid in a pressure Vessel operated at essentially a single pressure in excess of about 50 psia and below about 300 psia, and thereafter 2) recovering an acid gas-rich gas stream from the Vessel while maintaining the stream under said pressure, and 3) introducing said gas stream into a first stage compressor, and 4) thereafter reducing by compression the volume of said gas stream.
9. (Original) The process of Claim 8, where the gas stream is, after compression, disposed by injection to an ocean- or sea-bed or into a subterranean chamber or formation.
10. (Cancelled)
11. (Previously presented) The process of Claim 6 where, included in the treatment Fluid, is at least one co-solvent for acid gases selected from the group of:
 - a) methanol; and
 - b) C₁-C₃ alkyl mono- and di- ethers of ethylene, diethylene, triethylene, tetraethylene, pentaethylene, hexaethylene, heptaethylene, octaethylene, nonaethylene, and undecaethylene glycol; and
 - c) propylene carbonate; 1,3-dimethyl-3,4,5,6-tetrahydro-2(1H)-pyrimidinone; sulfolane; 1-methyl-2-pyrrolidinone; morpholine; N-formylmorpholine; and N- acetylmorpholine.
12. (Previously presented) The process of Claim 8 where heat is supplied to Fluid in the Vessel in a sufficient quantity that said Separation Step is conducted at a temperature in excess of 280 deg. F and below 400 deg. F.
13. (Previously presented) The process of Claim 8 wherein the stripping acid gas from the acid gas-rich absorption Fluid takes place in a pressure Vessel at a pressure in excess of about 55 psia and below about 300 psia.
14. (Previously presented) The process of Claim 8 wherein the stripping acid gas from the acid gas-rich absorption Fluid takes place in a pressure Vessel at a pressure in excess of about 130 psia and below about 300 psia.
15. (Previously presented) The process of Claim 8 wherein the stripping acid gas from the acid gas-rich absorption Fluid takes place in a pressure Vessel at a pressure in excess of about 50 psia and below about 200 psia.

16. (Previously presented) The process of Claim 8 wherein the stripping acid gas from the acid gas-rich absorption Fluid takes place in a pressure Vessel at a pressure in excess of about 50 psia and below about 155 psia.